



Docket No. 4266C2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Kuo-Liang Hsi et al.

Serial No.: 10/602,342

Filed: June 23, 2003

For: Effluent Collection Apparatus Method

) Group Art Unit: 1723

) Examiner: Ernest G. Therkorn

<p style="text-align: center;">CERTIFICATE OF MAILING</p> <p>I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on</p> <p style="text-align: center;"><u>October 21, 2003</u> (Date of Deposit)</p> <p style="text-align: center;"><u>Desi Inocencio</u> Name of Depositing Party</p> <p style="text-align: center;"><u>Desi Inocencio</u> Signature of Depositing Party</p>
--

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants submit herewith patents, publications or other information (listed on the attached Form PTO-1449) of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR §1.56.

This Information Disclosure Statement:

- (a) ☐ accompanies a new patent application submitted herewith.
- (b) ☐ is filed within three months after the filing date of the application or within three months after the date of entry of the national stage of a PCT application as set forth in 37 CFR §1.491.
- (c) ☒ as far as is known to the undersigned, is filed before the mailing date of a first Office action on the merits.
- (d) ☐ as far as is known to the undersigned, is filed before the mailing date of a first Office action after the filing of a request for continued examination under § 1.114.

(e) ☐ is filed after the first Office Action and more than three months after the application's filing date or PCT national stage date of entry filing but, as far as is known to the undersigned, prior to the mailing date of either a final action under §1.113, a notice of allowance under §1.311, whichever occurs first, and is accompanied by either the fee (\$180) set forth in 37 CFR §1.17(p) or a certification as specified in 37 CFR §1.97(e), as checked below. Should any fee be due, the U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 01-2213 in the amount of \$180.00 to cover the cost of this Information Disclosure Statement. Any deficiency or overpayment should be charged or credited to this deposit account. **A duplicate of this sheet is enclosed.**

(f) ☐ is filed after the mailing date of either a final rejection or a notice of allowance, but on or before the payment of the issue fee, and is accompanied by the fee (\$180) set forth in 37 CFR §1.17(i)(1) **and** a certification as specified in 37 CFR §1.97(e), as checked below. **This document is to be considered as a petition requesting consideration of the information disclosure statement.** The U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 01-2213 in the amount of \$180.00 to cover the cost of this Information Disclosure Statement. Any deficiency or overpayment should be charged or credited to this deposit account. **A duplicate of this sheet is enclosed.**

[If either of boxes (e) or (f) is checked above, the following "certification" under 37 CFR §1.97(e) may need to be completed.] The undersigned certifies that:

- ☐ Each item of information contained in the information disclosure statement was first cited in a communication mailed from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this information disclosure statement.

A copy of the items on PTO/SB/08A is supplied herewith:

☐ each ☒ none ☐ only those listed below:

Those patent(s) or publication(s) listed in the attached PTO/SB/08A form are not supplied because they were previously cited by or submitted to the Office in prior application Serial

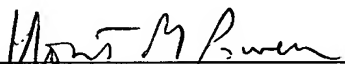
No. 08/887,350 filed July 2, 1997 now U.S. Patent No. 6,248,239 which is a continuation of application Serial No. 09/885, 292 filed June 19, 2001 now U.S. Patent No. 6,582,597 and relied upon in this application for an earlier filing date under 35 USC §120.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR §1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR §1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR §1.56(a) exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR §1.98 and MPEP §609 and the Examiner is respectfully requested to consider the listed references.

Respectfully submitted,

Date: Oct. 21, 2003



Vincent M. Powers, Reg. No. 36,246
Attorney for Applicants

Correspondence Address

Customer Number 22896
Applied Biosystems Division
Applera Corporation
850 Lincoln Centre Drive
Foster City, CA 94404
(650) 638-6492 (Phone)
(650) 638-6677 (Fax)

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Complete if Known		
			Application Number	10/602,342	
			Filing Date	June 23, 2003	
			First Named Inventor	Kuo-Liang Hsi	
			Group Art Unit	1723	
			Examiner Name	Ernest G. Therkorn	
			Attorney Docket No.	4266C2	
Sheet	1	of	2		

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	1	4,631,122		Pohl	12-23-1986	
	2	5,126,025		Carson et al.	06-30-1992	
	3	5,520,817		Anahara	05-28-1996	
	4	5,674,388		Anahara		
	5	6,248,239		Hsi et al.	06-19-2001	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				

OTHER ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	6	Cheng, Y. et al., "Membrane Fraction Collection for Capillary Electrophoresis," <i>Journal of Chromatography</i> . <u>608</u> :109-116 (1992).		
	7	Cheng, Y. et al., "Post-Capillary Immobilon -P Membrane Fraction Collection for Capillary Electrophoresis," <i>Biotechniques</i> . <u>14</u> :51-55 (1993).		
	8	Cohen, S.A. et al., "Post-Run Analysis of Proteins Purified by Capillary Electrophoresis with Membrane Fraction Collection," <i>Techniques in Protein Chemistry V</i> . Academic Press, San Diego, pp. 293-302 (1994).		
	9	Eriksson, K. et al., "Preparative Capillary Electrophoresis Based on Adsorption of the Solutes (Proteins) onto a Moving Blotting Membrane as They Migrate out of the Capillary," <i>Analytical Biochemistry</i> . <u>201</u> :211-215 (1992).		
	10	Fernandez, J. et al., "Internal Protein Sequence Analysis: Enzymatic Digestion for Less Than 10 µg of Protein Bound to Polyvinylidene Difluoride of Nitrocellulose Membranes," <i>Analytical Biochemistry</i> . <u>201</u> :255 (1992).		

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231. 60355_1

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known			
		Application Number	10/602,342		
		Filing Date	June 23, 2003		
		First Named Inventor	Kuo-Liang Hsi		
		Group Art Unit	1723		
		Examiner Name	Ernest G. Therkorn		
Sheet	2	of	2	Attorney Docket No.	4266C2

11	Grimm, R. and Herold, M., "Micropreparative Single Run Fraction Collection of Peptides Separated by CZE for Protein Sequencing," <i>Journal Cap. Elec.</i> <u>01</u> :79-81 (1993).	
12	Hawke, D.H. and Yuan, P-M, Applied Biosystems User Bulletin 28: 1-8 (1988).	
13	Hawke, D.H. and Yuan, P-M., "S-Pyridylethylation of Cystine Residues," <i>Applied Biosystems User Bulletin</i> <u>28</u> :1-8 (1987).	
14	Hsi, K-L. et al., "A Practical Approach for Isolation and Characterization of Glycosylation Sites of Glycoproteins Bearing N-and/or O-Linked Carbohydrate Chains," <i>Techniques in Protein Chemistry IV</i> . pp. 143-150 (1993).	
15	Hsi, K-L. et al., "Development of a Capillary LC Blotting Systems for Low and Sub-Picomole Sequencing Sample Preparation," <i>Protein and Peptide Lett.</i> <u>4</u> (1):1-8 (1997).	
16	Kochersperger, M.L. et al., Abstract No. 265-M, <i>Protein Science.</i> <u>3</u> (1):98 (1994).	
17	Konse, T. et al., "Blotting Membrane Micropreparation in Capillary Electrophoresis to Evaluate Enzyme Purity and Activity," <i>Analytical Biochemistry.</i> <u>214</u> :179-181 (1993).	
18	Murata, H. et al., "On-Line Membrane Blotting of Peptides and Proteins for a Capillary Column," <i>Analytical Biochemistry.</i> <u>210</u> :206-208 (1993).	
19	Spellman, W.M. et al., "Carbohydrate Structures of Human Tissue Plasminogen Activator Expressed in Chinese Hamster Ovary Cells," <i>Journal of Biol. Chem.</i> <u>264</u> (24):14100 (1989).	
20	Warren, W.J. et al., "Protein Immunodetection Using Capillary Electrophoresis with Membrane Fraction Collection," <i>LC-GC Magazine.</i> <u>12</u> :22-28 (1994).	
21	Werner, W.E. et al., "A New Sample Preparation Device for Protein/Peptide Sequencing," Abstract No. 505-M, <i>Protein Science.</i> <u>4</u> (2):150 (1995).	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231. 60355_1